



A smaller carbon
footprint.

The AMD Opteron™ Processor Helps AISO Grow
its 'Green' Business by Courting Eco-Friendly
Customers like Live Earth

About AMD

Advanced Micro Devices (NYSE: AMD) is a leading global provider of innovative processing solutions in the computing, graphics and consumer electronics markets. AMD is dedicated to driving open innovation, choice and industry growth by delivering superior customer-centric solutions that empower consumers and businesses worldwide.

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Challenge:

- Affordable Internet Services Online, Inc. (AISO) founders envisioned a Web hosting company that was environmentally friendly.
- While the company employed energy-efficient innovations like solar panels, its infrastructure produced unacceptable power and cooling requirements.

Solution:

- AISO deployed IBM® BladeCenter® servers running VMware virtual infrastructure software on nearly 700 Second-Generation AMD Opteron™ processors.
- The infrastructure is complementary to AISO's overall sustainability efforts such as solar panels and rain water harvesting.

Impact:

- The AMD Opteron™ processor-powered infrastructure supported AISO's exceptional growth. In the last six years, AISO grew by 60 percent, with customers ranging from small and mid-sized businesses (SMB) to Fortune 500 companies — all looking for an eco-friendly hosting company.
- Since AISO implemented IBM servers and AMD processors, the company has experienced excellent performance and acceptable heating and cooling requirements, due to the high efficiency of the systems.
- AISO has successfully hosted prominent companies' sites and events such as Live Earth, supporting over 50 million visitors in one day, with zero downtime, during a worldwide concert.



Organizational Profile

AISO.Net has been a trusted name in environmentally friendly Web hosting since 1997, providing a level of service that is outstanding in the industry. All network and server hardware is fully redundant with 24x7-automated systems monitoring to ensure high uptime. Using solar panels to power its data center and network, AISO.Net is a 100 percent solar-powered Web hosting company and was featured in Inc. magazine's Top 50 Green Companies.

For more information about AISO, visit www.AISO.Net



“Once we switched to the AMD Opteron™ processor we never looked back. Its efficiency and innovations have helped us remain on a truly green path to Web hosting and have played a large part in our success.”

—Phil Nail, Technology Manager, AISO

Challenge

The 1990s experienced a dramatic rise in Web hosting companies as outsourcing proved an effective means for many businesses to manage their Internet presence and applications. However, backlash against these companies arose as people began to realize the exceptional amounts of energy these Web farms consumed.

AISO created a unique value proposition by basing its Web hosting business on 100 percent solar power. This environmentally friendly company targets a wide range of customers — from a doctor based in Sweden to a major production company in Los Angeles — that all share the same goal: powerful computing conducted in an environmentally responsible manner.

While AISO's infrastructure sufficed for a time, in the end AISO determined that it was emitting unacceptable levels of heat, which yielded high power and cooling requirements and did not adhere to the company's eco-friendly goals.

AISO then switched to IBM servers powered by AMD Opteron™ processors, which helped alleviate the company's energy issues.

The system worked well, supporting AISO's rapid growth and the hosting needs of its increasing customer base. But, as always, AISO continued to search for improvement. To better support the goals of new customers like Live Earth as well as its own corporate agenda, AISO made additional green enhancements to its data center. AISO installed new carpeting made from recycled content; replaced all of its Compact Fluorescent Light Bulbs with LED lighting; repainted the building using only Leadership in Energy and Environmental Design (LEED)-certified paint; and installed an underground grey water tank to provide for outdoor landscaping. The next step was to take a look at its infrastructure.

AISO Technology Manager Phil Nail ascertained that virtualization was the next logical step for the company's infrastructure. Citing energy efficiency and space savings as primary virtualization benefits, the next process was to identify the infrastructure to power the new system.

“We decided to virtualize our entire infrastructure and we knew through industry pundits that AMD and VMware work well together. Having personally had such great luck with the AMD Opteron™ processor, we did not want to switch CPUs so we were happy to hear industry buzz was so favorable,” said Nail.

Solution

AISO deployed IBM® BladeCenter® servers running VMware® virtual infrastructure software powered by nearly 700 Second-Generation AMD Opteron™ processors. The infrastructure is complementary to AISO's overall sustainability efforts such as solar panels and rain water harvesting. Between its IT and campus infrastructure, AISO can offer customers a comprehensive green Web hosting strategy.

Impact

The AMD Opteron™ processor-powered infrastructure supported AISO's exceptional growth. In the last six years, AISO grew by 60 percent, with customers ranging from small and mid-sized businesses (SMB) to Fortune 500 companies — all looking for an eco-friendly hosting company. “We have so many companies coming here, visiting our site and moving their systems to ours,” said Nail. “It's such a pleasure coming in every day and checking out new orders from organizations ranging from green Web hosting companies in Denmark to Fortune 500 companies. Although they are diverse, they all share the same goal of running an environmentally friendly IT operation.”

Nail also commented on the exceptional performance, stating, “The overall performance of the AMD Opteron™ processors has helped us to maximize the amount of sites we use per individual server. Now that we are 100 percent virtualized the efficiency is even better.”

AISO has also successfully hosted prominent companies' sites and events such as Live Earth. On July 7, 2007, Live Earth launched a 24-hour, seven-continent concert series to combat climate change. Prior to the concert, Live Earth experienced one million visitors daily, but the day of the concert, Live Earth experienced more than 50 million visitors to the site, with zero downtime. “We were so confident in the system,” said Nail. “A colleague was getting married the same day of the concert, and we were all able to attend due to the flawless execution of our AMD Opteron™ processor-based infrastructure.”

